

Application Booklet

This document contains all licensing documents and forms necessary to apply for licensure as a professional engineer in the state of Texas. Although this is a PDF document, all forms and documents in this booklet are available individually in other formats on the agency website or can be obtained by calling the TBPE office. The forms in this packet can be filled out on your local computer then printed out to be mailed with your payment. Please call if you need further assistance.

**Texas Board of Professional Engineers
1917 IH 35 South
Austin, Texas 78741-3702**

**Email: licensing@tbpe.state.tx.us
Website: <http://www.tbpe.state.tx.us>**

Phone: 512-440-3089

TEXAS BOARD OF PROFESSIONAL ENGINEERS

Licensure As A Professional Engineer In Texas

Who Should be Licensed

Under the Texas Engineering Practice Act, only duly licensed persons may legally perform, or offer to perform engineering services for the public in Texas. Furthermore, public works must be designed and constructed under the direct supervision of a licensed professional engineer. The terms "engineer" or "professional engineer" can only be used by persons who are currently licensed. Anyone who violates these parameters is subject to legal penalties.

Purpose & History

The Engineering Registration Act (Article 3271a, V.A.T.S.) was enacted as the result of a tragic school explosion at New London, Texas, in 1937. In response to concerns that the public could not identify who was qualified to practice engineering, the 45th Texas Legislature passed the Act as emergency legislation and it became law when signed by the Governor on May 28, 1937. The 59th Texas Legislature rewrote the original Registration Act. This Act became law on August 30, 1965, and was called the "Texas Engineering Practice Act."

The authors of the Texas Engineering Practice Act included the following statement in Section 1001.004 of the Act:

"The legislature recognizes the vital impact that the rapid advance of knowledge of the mathematical, physical, and engineering sciences as applied in the practice of engineering has on the lives, property, economy, and security of state residents and the national defense. The purpose of this chapter is to: protect the public health, safety, and welfare; enable the state and the public to identify persons authorized to practice engineering in this state; and fix responsibility for work done or services or acts performed in the practice of engineering."

It therefore becomes apparent that this legislation was not enacted to restrict the number of practitioners, but rather to "safeguard life, health, and property and protect the public welfare."

The Texas Board of Professional Engineers is authorized and required to license those individuals who are qualified by law to practice engineering, and to regulate the practice of engineering in Texas. To accomplish this mission, the Legislature further empowered the Board to make and enforce the rules dealing with licensing, compliance and enforcement, and standards of conduct and ethics.

Contacting the Board

The Board office is located at 1917 South IH-35 in Austin.

Send all mail to:

Texas Board of Professional Engineers
1917 IH 35 South, Austin, TX 78741-3702

TBPE website: www.tbpe.state.tx.us

Licensing questions may be directed to: licensing@tbpe.state.tx.us

Board telephone numbers are: (512) 440-7723 and (512) 442-1414/Fax

Office hours are from 8:00 a.m. to 5:00 p.m., Monday through Friday, except for state and federal holidays.

Basic Requirements for Licensure

There are three basic categories of requirements that must be met for licensure: education, experience, and examinations.

Education - You must have earned one of the following degrees or degree combinations:

1) An accredited degree in engineering from an EAC/ABET accredited program in the United States or equivalent. Qualifying degree may be an undergraduate degree or an advanced degree issued by a program with an undergraduate program in the same discipline.

Equivalent degrees include:

- A) Degrees from US programs specifically reviewed and approved by the Board;
- B) Degrees from engineering programs covered by the Washington Accord, an international agreement between ABET and similar accrediting organizations from other countries;
- C) Degrees from programs accredited by the Consejo de Acreditacion de la Ingenieria, Mexico;
- D) Degrees held by engineers currently licensed in Canada; and
- E) Foreign degrees from programs not covered by B) - D) above which are deemed equivalent by one of the Board approved evaluation service providers.

2) A non-accredited degree:

- A) An engineering degree from a US program at a recognized institution of higher learning that does not meet the conditions of 1) above;
 - B) A degree in engineering technology from a TAC/ABET accredited program; or
 - C) A US degree in mathematical, physical, or engineering science approved by the Executive Director.
- All degrees or combination of degrees must have at least:
8 hours of math beyond trigonometry (courses such as calculus and differential equations) and,
20 hours of engineering sciences (courses such as mechanics, thermodynamics, electrical & electronic circuits, materials science, transport phenomena, computer engineering, etc.).

Contact the Licensing staff if you have questions regarding your educational credentials.

Experience - You must meet the following experience requirements prior to submitting your application to the Board:

1. With an accredited engineering degree you must have 4 years or more of active practice in engineering work, of a character satisfactory to the Board, indicating that you are competent to be placed in responsible charge of such work. This experience must demonstrate a clear use of your engineering knowledge, engineering education, and engineering judgment to perform the task, be progressive, of an increasing standard of quality and responsibility in one dominant discipline. Although it is recommended that the engineering experience be obtained while working under the supervision of a licensed professional engineer, this is not a requirement for licensure.

2. With a non-accredited degree you must have 8 years of active practice in engineering work, of a character satisfactory to the Board.

During your first few years of experience after graduation, it is imperative that you place an emphasis on gaining experience that is acceptable for licensing purposes. Failure to become licensed can severely limit your potential professional growth.

While gaining experience, it is equally critical that you document it in such a way that you can summarize it for the Board. As you go about your weekly tasks, you should keep a detailed diary of your activities: the starting and ending dates of the project(s) on which you worked, name and address of each employer, job title(s), the name, present addresses and phone numbers of the engineers and other persons with which you personally

worked who can serve as a reference to substantiate your experience, identification of the project, the scope of the project, and the engineering activities that you personally performed.

When you are ready to apply for licensure, this information will be transferred from your diary into a summary called the Supplementary Experience Record (SER). It should range from about 6 to 12 pages and adequately describe the engineering activities that you have performed for your entire engineering career, starting with the first engagement after graduation from college. The SER is to be written in the first person describing in active engineering verbs the engineering work you specifically designed, calculated, evaluated, analyzed, etc.

Experience that is considered most acceptable for licensure purposes generally falls into one of two categories: design or analysis.

The most common type of acceptable experience is design. The common denominator in all design is the selection and use of recognized engineering principles and methodology to determine a solution to a problem. The final result of design work will almost always be details, plans, or specifications for use in creating a finished product.

The second common type of acceptable experience is analysis. Common features of analysis activities include the use of mathematical modeling or review of established design standards to assess a problem or proposal, and the act of making a learned recommendation based on analytical findings. An engineering analysis activity will result in a conclusive report and recommendation.

It should be noted here that many other types of activities will also be acceptable if your participation in those activities can be described in terms of design or analysis. By asking yourself if you can describe your activity in terms such as "I calculated..., I designed..., I analyzed..., I recommended...", you can almost assure yourself that you are describing design and analysis.

References - You are required to submit at least three confidential reference statements to the Board, from currently licensed professional engineers who are familiar with the work you describe in your SER. If you are applying for an original license and requesting an examination waiver you must submit five references, which must be from currently licensed professional engineers. You will choose the engineers to request references from. You should be aware that it is within an engineer's prerogative to provide a reference if he or she is comfortable giving one. The reference provider will provide the Board with an assessment of your character and suitability for licensure and will verify the quality and scope of the work that you describe in your SER on the Reference Statement Form. The references do not all need to be from supervisors. A professional engineer who is familiar with your work, but may not be your supervisor will be acceptable as a reference. Professional engineers who can vouch for your character, but do not have personal knowledge of your engineering experience may review and judge your documented experience and serve as a reference. Such review will be documented on the Reference Statement Form.

One year of experience credit may be granted for each advanced (post-baccalaureate) engineering degree if the applicant has a degree in engineering and the advanced degree(s) are from an engineering program which has an accredited undergraduate program as described in section 1) of the education requirements above. Experience credit for all advanced degrees is limited to two years. Official transcripts are required to claim this credit, but SERs and references for this period are not necessary.

Examinations – To qualify for licensure, all applicants must take and pass three examinations:

- 1) The National Council of Examiners for Engineering & Surveying (NCEES) Fundamentals of Engineering (FE) examination;
- 2) The NCEES Principles and Practice of Engineering (PE) examination; and
- 3) The Texas Engineering Professional Conduct and Ethics Examination.

The FE and PE examinations are both 8-hour tests and are given twice a year at various locations in Texas (certain PE tests are given only once per year). The testing dates are scheduled for April and October.

FE Exam –

Only Texas residents may take the FE examination in Texas. The FE examination is a supplied reference examination consisting of 120 questions in the morning session and 60 questions in the afternoon session. All candidates take the morning section, which consists of questions common to all disciplines. The afternoon session is administered in six disciplines and a general engineering section. The candidate will choose which section to work in the afternoon session. The FE format and specifications may be viewed/printed from the NCEES website at: <http://www.ncees.org>.

The Board expects all applicants to be able to pass the exams. The Board may, at its discretion, waive the FE examination for well qualified applicants who provide a written request submitted with an application for licensure, do not pose a threat to the public health, safety, or welfare, and have:

- (a) an accredited degree and 8 or more years of engineering experience, or
- (b) a non-accredited degree and 12 years of engineering experience, or
- (c) a current Engineering Educator at a recognized institution of higher education with a Ph.D. in engineering from a program with an EAC/ABET accredited undergraduate program or equivalent.

All requests for waiver of the FE will be subject to review by the Executive Director and may be reviewed by Board members. Requests for waiver (even those meeting the above guidelines) may be denied.

PE Exam –

The Principles and Practice of Engineering examination is a test offered in a specific discipline of engineering. You will be granted permission to take the PE exam only after your application for licensure has been approved. You may test in any of the following disciplines:

Agricultural (October only)	Industrial (October only)
Architectural (April only)	Mechanical
Chemical	Metallurgical (October only)
Civil	Mining/Mineral (October only)
Control Systems (October only)	Naval Architecture & Marine (April only)
Electrical and Computer	Nuclear (October only)
Environmental	Petroleum (October only)
Fire Protection (October only)	Structural I and II

The examination formats and specifications may be viewed/printed from the NCEES website at: <http://www.ncees.org>

The Board expects all applicants to be able to pass the PE exam that relates to his or her discipline. The Board may, at its discretion, waive the PE examination for well qualified applicants who provide a written request submitted with the application, do not pose a threat to the public health, safety, or welfare, and are:

- 1) A former Texas license holder or an engineer currently licensed in another US jurisdiction with:
 - (a) an accredited degree and 12 or more years of engineering experience; or
 - (b) a non-accredited degree and 16 years of engineering experience; or
- 2) A current Ph.D. Engineering Educator (as defined by Board rules) who has qualifying engineering experience teaching in an EAC/ABET program for at least eight years or has at least eight years of engineering experience consisting of an acceptable combination of other creditable engineering experience or EAC/ABET teaching experience. Only teaching of engineering which began prior to September 1, 2001 may be counted as qualifying engineering experience.

All requests for waiver of the PE will be reviewed by Board members. Requests for waiver (even those meeting the above guidelines) may be denied.

The Texas Engineering Professional Conduct and Ethics Examination is a self-administered examination concerning the Texas Engineering Practice Act and the Board Rules. It should be completed by the applicant and submitted with the application.

Applying for Licensure

The process of applying for licensure is rather time-consuming and you should give yourself plenty of lead-time prior to the date that you wish to have the application submitted. Once the complete application is submitted, allow 2-3 months for processing. Incomplete applications or those requiring Board review may take longer. Once the Board approves you to take the PE examination, you will be allowed to pay the examination fee and schedule the next examination before the deadline. These deadlines are about 8 weeks before the examination.

The following is a checklist of activities that you must perform to complete the application process:

1. Evaluate your education and determine the category under which you qualify for licensure. If you believe that you may have any deficiencies or if you need an evaluation to see if you meet the minimum education requirements, you should contact the TBPE. Application fees are non-refundable.
2. Take and pass the Fundamentals of Engineering (FE) examination or request a waiver. If you have not done so, you should contact the Board (or your school, if you have not graduated) as soon as possible and begin the process. The FE examination is offered in April and October of each year, but registration deadlines are set well in advance. Deadlines are posted on the TBPE website. If you are not able to register on-line, be sure to contact the TBPE to request an examination scheduling form well in advance of test scheduling deadlines.
3. Evaluate your engineering experience. Again, if you believe that you have any deficiencies, you should contact the TBPE for help. **DO NOT ANTICIPATE EXPERIENCE.** The minimum experience must be earned prior to application submittal. Applications submitted when claimed experience prior to the date of submittal is less than the minimum requirements may be denied.
4. Request references from PEs. You must have at least three, but may need more depending on the circumstances of your experience. You must send your reference providers a copy of your signed SER. Keep the original to submit with the application.
5. Contact your university and request official transcripts. Official transcripts (marksheets and diplomas) are to be sent from the issuing institution directly to the Board. Student copies are not acceptable.
6. Complete your application as instructed. The application form must be typed (not hand-written). Applicants with foreign degrees or other unique situations should be aware that there may be additional requirements such as Test of English as a Foreign Language (TOEFL), the Test of Spoken English (TSE), and degree evaluations.
7. Complete the Texas Engineering Professional Conduct and Ethics Examination and submit the answer sheet or results with the application.
8. Applicants who have taken and passed the FE and/or PE exam in another US jurisdiction will not have to take them again in Texas, but will be required to obtain verification of those exams from the appropriate jurisdiction to be sent directly to the TBPE.

Should you have any questions, please contact the Board office.

Payment Coupon

Failure to include the coupon below may result in a delay in the processing of your application.

Be sure to detach the coupon below and include it with your payment and application.

Texas Board of Professional Engineers

PE Application Payment

Name (Please print) _____	Social Security Number _____	Email Address _____	Amount Due \$250
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Please do not write in this area.

Application Information Checklist

For an application to be considered **complete**, you **must** include the following items.
Note that your application will not begin processing until items #1-4 have been received.

Items 1-4 must be sent to the board from the APPLICANT:

- 1) ☐ Complete four (4) page application form (Form EB-04)
- 2) ☐ Original SER (Form EB-13) - Signed by APPLICANT ONLY *
 - 1) Submit one complete copy of your SER with your application form.
 - 2) Provide copies to reference providers to co-sign (See #6 & #7 below)
- 3) ☐ Completed Texas Engineering Professional Conduct and Ethics Exam Answer Sheet (Form EB-01)
- 4) ☐ \$250 Application Fee (Don't forget the payment coupon with your check or money order.)

Item 5 must be sent directly to the board from the EDUCATIONAL INSTITUTION:

- 5) ☐ Transcript(s) (Transcript Request Form EB-29) *

Items 6 & 7 must be sent to the board by one of the following methods:

- ☐ collected by applicant and sent in all at once with the application
 - ☐ sent directly to the PE Board by the references themselves
(See Board Rule 133.51 for number of references required)
- 6) ☐ Completed reference statement signed by reference provider (Form EB-15) *

Each Reference Provider is REQUIRED to:

- Place SER and REFERENCE STATEMENT in an envelope and seal it.
- SIGN the flap of the envelope.
- Place a piece of transparent tape over the signature for confidentiality.
- Include a copy of pocket card or other proof of licensure if non-Texas PE

- 7) ☐ Copy of SER signed by applicant AND reference provider (Form EB-13) *

8) Include the following if applicable:

Send with application:

- a) ☐ Written Request for Waiver of one or both exams
- b) ☐ Verification of Legal Name Change (due to marriage, immigration, etc.)
- c) ☐ Proof of TOEFL/TSE or signed statement from employer of proficiency in written & spoken English
- d) ☐ Translation of Foreign Degree
- e) ☐ Statement and copies of information related to Criminal Convictions

Send directly from Issuing Institution:

- f) ☐ Verification of Examinations (Prior FE and/or PE Exams) (Form EB-38) *
- g) ☐ Verification of Current License (in another jurisdiction) (Form EB-38) *
- h) ☐ Commercial Evaluation of Non-Accredited Degree *

*** You may submit NCEES Council Record in lieu of items marked with an asterisk. However, please fill out the information when requested on this application.**



APPLICATION FOR LICENSURE AS A PROFESSIONAL ENGINEER

NOTE: All information on this form is subject to verification by the Board.

IMPORTANT-Do not complete this form until you have read and thoroughly understood the instructions and the requirements for licensure. All information provided by you on this form must be TYPEWRITTEN (HANDWRITTEN APPLICATIONS WILL NOT BE ACCEPTED.). Do not leave any section blank. State "not applicable" or "none" if such is the case. Omission of any information requested in any section of this application without satisfactory explanation may prevent the processing of your application. Only one copy of each form in the application packet has been provided. Please make additional copies as required. The application fee is \$250.00. Payment must be submitted with your application and must be made by check or money order. Cash will not be accepted.

1. GENERAL INFORMATION

1. I am a: ☐ Texas resident ☐ currently licensed in another jurisdiction ☐ not applicable
2. United States Citizen? ☐ Yes ☐ No, If no, give INS status _____ Card No. _____
3. I am applying for a: ☐ Regular License ☐ Temporary License [Refer to Board rule 133.11.]
4. Full Legal Name _____
(First) (Middle, if initial only- "IO", if None "NMI") (Last) (Suffix)
☐ Mr. ☐ Ms. ☐ Dr. (Name changes must be supported by a copy of the legal document.) Maiden Name _____
5. Social Security Number _____ Date of Birth _____
6. Addresses: (Your residence address will be the address of record for all Board correspondence.) If your address changes during the licensure process, please notify the Board using the following page: <http://www.tbpe.state.tx.us/change>
E-mail Address: _____
Residence: Street _____
City _____ State _____ Zip Code _____
Telephone No.: () _____ Fax No.: () _____ (zip + 4)
Business: Firm Name _____
Street _____
City _____ State _____ Zip Code _____
Telephone No.: () _____ Fax No.: () _____ (zip + 4)
7. Drivers License No. _____ State _____
8. What is your primary branch of engineering? _____ [Refer to Board Rule 133.13 and 133.97(i).]
9. Have you ever been denied a license in Texas? This includes denial for failure to pass the Principles and Practice (P&P) examination within the prescribed time period. ☐ No ☐ Yes
10. Have you previously been issued a license in Texas? ☐ No ☐ Yes Serial No.: _____ Expiration Date _____
11. Other than a simple traffic violation, have you ever been convicted, placed on probation, granted deferred adjudication or any type of pre-trial diversion for a felony or misdemeanor? ☐ No ☐ Yes
(An affirmative answer to question No. 11 **MUST** be explained on the Criminal History Form.)
12. Has the Texas Board of Professional Engineers ever taken disciplinary or administrative action against you? ☐ No ☐ Yes
13. Has any other state's engineering licensing board ever taken disciplinary or administrative action against you? ☐ No ☐ Yes
14. Do you have an NCEES record? ☐ No ☐ Yes If yes, what date was it transmitted to Texas? _____

2. LICENSURE AND EXAMINATIONS

*** Note: If you provide the NCEES record, you will not need to provide verifications indicated by an asterisk. However, please complete the information on this form.**

1. ☐ I have taken and passed the NCEES Fundamentals of Engineering Exam (FE).
(If exam was taken outside of Texas, send a copy of Form EB-38 to the jurisdiction listed.) *
Where _____ When _____
☐ I am requesting a waiver of the FE examination and meet the requirements of Board Rule §133.69. (Include a separate written request for waiver with application [Per to Board Rule §133.69(a)(2).] Note: a waiver is not automatic as it requires an approval vote of the Board.)
2. ☐ I am requesting permission to take the NCEES Principles and Practice of Engineering Exam (PE).
☐ I have taken and passed the NCEES Principles and Practice of Engineering Exam (PE).
(If exam was taken outside of Texas, send a copy of Form EB-38 to the jurisdiction listed.) *
Where _____ When _____
☐ I am requesting a waiver of the PE examination and meet the requirements of Board Rule § 133.69. (Include a separate written request for waiver with application [Per Board Rule §133.69(a)(2).] Note: a waiver is not automatic as it requires an approval vote of the Board.)
3. List each state, territory, or nation where you:
a) hold a current license _____
b) have previously held a license _____

c) have been denied a license, including failure to pass the required examination.

d) have been disciplined by the licensing authority of that jurisdiction

(Answers to c & d **MUST** be explained on a separate sheet of paper.)

4. Provide verification of your current license from the state, territory, or nation you considered to be your **primary jurisdiction**. This Jurisdiction is _____ (Send a copy of Form EB-38 to the licensing authority of the **PRIMARY JURISDICTION** listed.) *

5. Complete and enclose the Texas Ethics of Engineering Examination answer sheet.

3. EXPERIENCE

List below in chronological order, all places of employment or unemployment, starting with the receipt of your first engineering degree, **accounting for all periods of time**. Your earliest employment is Engagement 1, etc. An engagement is one employer. A change in employer is a new engagement. DIFFERENT PROJECTS, SUPERVISORS, OR POSITIONS/PROMOTIONS HELD IN THE SAME CAPACITY FOR ONE EMPLOYER ARE NOT CONSIDERED SEPARATE ENGAGEMENTS. **DO NOT LIST CONCURRENT OR OVERLAPPING ENGAGEMENTS. IF NECESSARY TO DO SO, CONCURRENT AND OVERLAPPING ENGAGEMENTS MUST BE EXPLAINED ON A SEPARATE SHEET OF PAPER.**

Provide the name, address, and telephone number of someone familiar with your work for each engagement, preferably the person to whom you reported. If you were unemployed, provide the name of an individual who can verify your status. If you are/were self-employed, do not give yourself as a reference, but give the name and address of someone familiar with your work. Each of the individuals listed may be contacted; therefore, it is important that you furnish a complete mailing address, zip code and phone number.

Give the present date under "To" on latest engagement. **DO NOT** use "present".

DATES		EMPLOYMENT ENGAGEMENTS OR PERIODS OF TIME	TIME				NAME, TELEPHONE NUMBER AND PRESENT ADDRESS OF PERSON WHO CAN VERIFY EMPLOYMENT OR UNEMPLOYMENT	
			NON-ENGINEERING		ENGINEERING			
			Yrs.	Mos.	Yrs.	Mos.		
1.	Month Year	Firm Name _____ Address _____ Position Held _____						
From								
To								
2.	Month Year	Firm Name _____ Address _____ Position Held _____						
From								
To								
3.	Month Year	Firm Name _____ Address _____ Position Held _____						
From								
To								
4.	Month Year	Firm Name _____ Address _____ Position Held _____						
From								
To								
5.	Month Year	Firm Name _____ Address _____ Position Held _____						
From								
To								
6.	Month Year	Firm Name _____ Address _____ Position Held _____						
From								
To								
Total Time This page								

DATES		EMPLOYMENT ENGAGEMENTS OR PERIODS OF TIME	TIME				NAME, TELEPHONE NUMBER AND PRESENT ADDRESS OF PERSON WHO CAN VERIFY EMPLOYMENT OR UNEMPLOYMENT
			NON-ENGINEERING		ENGINEERING		
			Yrs.	Mos.	Yrs.	Mos.	
7.	Month Year	Firm Name _____ Address _____ Position Held _____					
From							
To							
8.	Month Year	Firm Name _____ Address _____ Position Held _____					
From							
To							
9.	Month Year	Firm Name _____ Address _____ Position Held _____					
From							
To							
10.	Month Year	Firm Name _____ Address _____ Position Held _____					
From							
To							
11.	Month Year	Firm Name _____ Address _____ Position Held _____					
From							
To							
12.	Month Year	Firm Name _____ Address _____ Position Held _____					
From							
To							
13.	Month Year	Firm Name _____ Address _____ Position Held _____					
From							
To							
14.	Month Year	Firm Name _____ Address _____ Position Held _____					
From							
To							
15.	Month Year	Firm Name _____ Address _____ Position Held _____					
From							
To							
Total Time This page							
Total of All Time							

4. EDUCATION

*** Note: If you provide the NCEES record, you will not need to provide transcripts indicated by an asterisk.**

However, please complete the information on this form.

Indicate Accredited Degrees: Provide official transcripts from all institutions listed below in accordance with Board Rule 133.35. (Send a copy of the enclosed Form 29 to the institutions listed on your application.) *

Degree Program	Degree (BS, MS, PhD)	Date Conferred	Full Name and Location (City and State) of College/University	Dates of Attendance

Indicate Non-Accredited Degrees: Provide official transcripts (mark sheets & diplomas) from all institutions listed below in accordance with Board Rule 133.35. (Send Form 29 to **EACH** institution listed on your application.) *

Do **not** provide original transcripts in your possession. Such documents are not acceptable and the Board will **not** be responsible for returning them to you.

Degree Program	Degree (BS, MS, PhD)	Date Conferred	Full Name and Location (City and State) of College/University	Dates of Attendance

If the degree is from a foreign country provide: 1) copies of TO EFL and TSE scores or a written request for waiver and supporting documentation in accordance with Board Rule 133.21(9) & (11); 2) a commercial evaluation of the non-accredited degrees or a written waiver and documentation in accordance with rule section 133.33. (Refer also to Documentation for Non-Accredited and Foreign Degrees handout.)

5. AFFIDAVIT

I affirm that I am the applicant named in the foregoing instrument, that I have read the contents thereof, and that the foregoing statements are true and complete in all respects. I have obtained a copy of, have read and agree to abide by the Texas Engineering Practice Act (Section 1001) and the Board Rules. I believe that I meet the statutory requirements of the section of the Act under which I am applying for licensure in the State of Texas. I further agree that upon issuance of a license, I will obtain a seal as instructed by the board and furnish a wallet size portrait photograph to the Board for its files in accordance with Board Rule 133.97(e).

Signature of Applicant

Date

Comments: (Optional)

Texas Professional Conduct and Ethics of Engineering Exam

Covering the Texas Engineering Practice Act and Board Rules for

Engineers Seeking Licensing in Texas

Administered by the

Texas Board of Professional Engineers

1917 IH 35 South, Austin, Texas 78741

Version XIII --- September 2009

The purpose of this exam is two-fold: First to assure the Board that the applicant is familiar with the state law and board rules, and secondly, to give the applicant experience in using the Act and Board Rules as guidance in professional conduct and ethics in the practice of engineering in Texas.

INSTRUCTIONS

TAKING & RETURNING THE EXAM: Before answering the questions on this exam, please read the Texas Engineering Practice Act and Board Rules, a copy of which can be downloaded for your use in completing this Exam. In answering the questions, you should select one correct answer to each question, and record your answer on this sheet below. You may keep the Act and Board rules for future use and reference in your engineering practice. When complete, sign at the bottom and **return the answer sheet** to the board office at the time you file your application.

ANSWER SHEET

PLEASE SHADE THE BOX CONTAINING THE CORRECT ANSWER

1	A	B	C	D	E
2	A	B	C	D	E
3	A	B	C	D	E
4	A	B			
5	A	B	C	D	E
6	A	B	C	D	E
7	A	B	C	D	E
8	A	B	C	D	E
9	A	B	C	D	E
10	A	B			
11	A	B	C	D	E
12	A	B	C	D	E
13	A	B	C	D	E

14	A	B	C	D	E
15	A	B	C	D	E
16	A	B			
17	A	B	C	D	E
18	A	B	C	D	E
19	A	B	C	D	E
20	A	B	C	D	E
21	A	B	C	D	E
22	A	B	C	D	E
23	A	B	C	D	E
24	A	B	C	D	E
25	A	B	C	D	E

PASSING REQUIREMENTS: This open book exam over the Law and Rules of the Texas Engineering Practice Act requires a score of **92% for passing**. If a score below 92% is made, you will be notified and may download or have a new exam sent to you. The application will not be processed until the minimum passing score of 92% is achieved.

Full Name: _____ **Last 4 digits of SS#:** _____ **Date:** _____

By signing this sheet, the applicant assures the Board that they have read the Texas Engineering Practice Act and the Board Rules in their entirety, and they have not given nor received assistance on answering the questions on this exam.

Signature: _____

Texas Professional Conduct and Ethics of Engineering Exam – Texas Board of Professional Engineers

Texas Engineering Professional Conduct and Ethics Examination Based on the Texas Engineering Practice Act and Board Rules

There are two ways to take this exam:

1. Download and fill out answer sheet EB-01 as you take this exam. You will also need to download or refer to a copy of the Texas Engineering Practice Act and Board Rules. These documents are available at: www.tbpe.state.tx.us/downloads.htm#ethics
2. Take the exam online. The exam, answer sheet and the Texas Engineering Practice Act and Board Rules are all available at: www.tbpe.state.tx.us/ethics_exam_login.php

Authority and Scope: In June 2003, The Texas Engineering Practice Act (Act) was re-codified into the Occupations Code and can now be found under Title 6, Chapter 1001. The Act & board rules govern the practice of engineering in Texas and, among other things, make it a professional and ethical requirement for engineers to practice "... in conformance with standards, laws, codes, and rules and regulations applicable to engineering." The Texas Board of Professional Engineers (hereafter, "the Board") consists of six licensed engineers and three public members appointed by the governor. This Board administers the Texas Engineering Practice Act & board rules on behalf of the citizens of Texas. The Board requires this Professional Conduct and Ethics Examination to help ensure that applicants for an engineering license in Texas have studied their responsibilities – ethical, professional, and legal – and that applicants are aware that guidance is available on these matters.

The objectives of this examination are to:

1. Ensure that an applicant is familiar with the professional practice provisions of the Act and board rules;
2. Promote the Act and board rules as a resource when confronted with professional conduct and ethical decisions;
3. Introduce an applicant to typical ethical and professional practice issues; and
4. Raise awareness that, when necessary, the Board serves as a disciplinary body through its compliance and enforcement powers.

Act and Board Rules: In accordance with these objectives, you will need to refer to a current copy of the Act & board rules as you take the examination, which may be found in electronic copy on the Board's website at www.tbpe.state.tx.us/downloads.htm. A complete version of the existing law and rules is on the site. The Texas Engineering Practice Act, as Chapter 1001 is commonly called, was first enacted in 1937 and is amended periodically. The Act contains provisions prescribed by the Texas Legislature to govern the practice of engineering in Texas and protect the public health, safety and welfare in matters related to the practice of engineering. The section of the Act are denoted §1001.XXXX". The board rules, under Title 22, Chapters 131-139 of the Texas Administrative Code, are established by the Board to further clarify and prescribe procedures for complying with the Act and are denoted "§13X.YY". (Example: §137.55)

Examination Format and Responses: You will be asked to consider a series of typical professional conduct and ethics scenarios that may have actually occurred in engineering practice in Texas. Following each scenario, you will be asked one or more questions. Based on the scenario and your review of the Act and board rules, choose the best answer for each of the following questions. Please read each question carefully. It is important to understand each participant's role in the scenario and if a rule is applicable to that participant. The exam is open book so you may review and study the rules as you proceed. You must answer **at least 23 questions (92%) correctly** to satisfy the Board requirements of review of the law and rules through this Professional Conduct and Ethics Examination. If you are unsuccessful in passing the exam on the first attempt, you will have an opportunity to take the exam again.

Texas Engineering Professional Conduct and Ethics Examination

Scenario 1 Direct Supervision and Sealing of Engineering Work

Brian is a graduate engineer and has passed the FE exam but is not yet licensed. He is employed by a small engineering firm, and works with Jim, a licensed professional engineer and owner of the company. The firm is retained to do the structural design of a new rural public school. The project is assigned to Brian.

After completing his preliminary calculations for the structure, Brian does a computer analysis of some of the more complex aspects of the design. This computer analysis shows Brian's hand calculations are essentially correct.

Although Brian feels he is quite thorough and conscientious, he notices that Jim is rarely in the office, provides little or no supervision, and never checks Brian's work before sealing and submitting the plans and specifications to the client for the bidding and construction phases.

Brian wonders if Jim is in conformance with the Act and board rules and decides to discuss the matter with him.

Question 1. The board rule that most clearly addresses sealing requirements is:

- A) §137.55(a)
- B) §137.59(a)
- C) §137.33(b)
- D) §137.63(c)(1)
- E) §137.63(b)(2)

After talking with Brian, Jim agrees that he needs to review the design. He studies it in detail, noting a few minor errors in the wind loading that Brian used, but finds nothing that would require changes in the design when constructed at that location.

Brian appreciates the feedback and becomes more comfortable in his job. Then Brian learns

that Jim has given the design plans and specifications to his brother, Christopher, a construction contractor, not a licensed engineer.

Rather than hire an engineer, Christopher incorporates the design documents into a design-build proposal for a like-sized (small) school. Jim is aware of this and does not object.

Question 2. Which board rule best relates to Jim knowingly allowing Christopher to use his design as described?

- A) §137.63(c)(1)
- B) §137.33(i)
- C) §137.55(b)
- D) §137.65(a)
- E) §137.33(f)

Question 3. Which section of the Act or board rule relates to Christopher's actions?

- A) § 137.59(a)
- B) § 137.65
- C) § 139.13
- D) § 1001.004
- E) § 139.17

In part due to the competitive advantage afforded by using an existing set of drawings, Christopher's company wins the design-build contract for the school. Christopher studied mechanical engineering in college and designs the mechanical systems for the school. He knows he needs an engineer's seal on the drawings before he can get a permit to start construction. He has a good friend, David, who is a mechanical engineer licensed in Texas, so Christopher asks David to seal the drawings.

David obtains a digital copy of Christopher's drawings, carefully reviews each sheet, adds the title block and other administrative designations, and affixes his engineer's seal to the drawings.

David's act of sealing Christopher's design drawings can be evaluated based on definitions in §131.81 of Act and board rules, in particular, "*direct supervision*," "*responsible charge*," and "*responsible supervision*."

Question 4. Does David meet the requirements of direct supervision in as defined in §131.81 of the board rules?

- A) Yes
- B) No

Sealing work not performed under an engineer's direct supervision is commonly termed "plan stamping." Violations of the Act or any rule or regulation of the Board is sufficient cause for the Board to suspend or revoke an engineer's license, to issue a formal or informal reprimand, or to issue administrative fines.

Question 5. What Section of the Act allows the Board to discipline a license holder?

- A) §1001.4525
- B) §1001.203
- C) §1001.405
- D) §1001.407
- E) §1001.451

Question 6. Assume that David is found to have sealed work not performed under his direct supervision, what would be the recommended sanction for this violation based on the table in §139.35(b)?

- A) Reprimand/\$1000 fine
- B) 2 year suspension/ \$2,500 fine
- C) 3 year suspension/\$3,000 fine
- D) Revocation/\$3,000 fine
- E) 1 year suspension/\$1,500 fine

Scenario 2 "Why Licensure?"

Trish is an unlicensed software engineer and has wondered why licensing of engineers is important.

Her friend José, a licensed engineer, explains that the licensing process was established by the Texas Legislature after a tragic explosion of a school in New London, Texas in 1937, in which more than 200 children and teachers were killed.

José elaborates that the Law states that the privilege of practicing engineering is entrusted only to those persons duly licensed, this in order to protect the health, safety and welfare of the public.

José gives Trish a copy of the Act and board rules for reference. Although Trish works for an industry that is "exempt" from the requirement of licensure, she learns that if she ever offers or provides engineering services outside her company, she will be required to be licensed.

Question 7. Which Section of the Texas Act

would exempt an engineering employee working solely for a manufacturing firm from the engineering licensure provisions of the Act?

- A) §1001.057
- B) §1001.056
- C) §1001.060
- D) §1001.058
- E) §1001.055

Through further inquiry, Trish learns that she cannot advance to the top administrative positions of her company unless she has an engineering license. She informs the corporate engineering director of her interest in licensure, and he encourages her to pursue it.

After studying the Act and board rules, Trish learns that the licensure process requires, among other things, documentation of her engineering experience and suitable engineering references. But this causes Trish to be concerned about a previous employment situation which she left due to difficult personal reasons not related to her technical abilities.

Although she knows she is technically competent

and is a talented engineer, Trish is fairly certain that her former supervisor, Quentin, a licensed engineer, holds a grudge against her and will not give her a favorable reference because of the difficult circumstances surrounding her departure. Nevertheless, Trish decides ask Quentin to verify this portion of her engineering experience in her application since he was her engineering supervisor.

Question 8. Which Section in the Act or which board rules should protect Trish from a retaliatory action from her former supervisor?

- A) §1001.212
- B) §1001.452
- C) §133.51(c)
- D) §137.63(c)(2)
- E) §137.37

Scenario 3

Competitive Bidding, Political Contributions, and Marketing

Rachelle, a licensed engineer and corporate officer in her engineering firm, has been very involved in community affairs over her entire professional career, and is supportive of political candidates who represent what she believes to be better government.

A local county official, Phillip, has gained acclaim by seeking better recreational facilities for the economically disadvantaged persons of his county. Phillip sends Rachelle a Request for Proposal (RFP) which requests a bid for a hydrology study associated with a new phase of development in a low-lying park area.

The RFP emphasizes that County funds are limited, that Phillip intends that the project help as many disadvantaged persons as possible, and that the fee will be considered in selection of the engineer.

While Rachelle is sympathetic with Phillip's aspirations to help the disadvantaged, she responds to the RFP with a letter stating that competitive bidding for engineering services in the public sector is prohibited by law under the Professional Services Procurement Act (PSPA).

She reminded Phillip that, according to the Texas board rules, an engineer can be sanctioned for bidding engineering services on public works.

Question 9. Which Section of the Act or board rule most clearly directs an engineer on the matter of competitive bidding for public work

with a governmental entity or their representative?

- A) §1001.203
- B) §1001.402
- C) §1001.407
- D) §137.57(a)
- E) §137.53(a)

Question 10. Do the Act or board rules prohibit competitive bidding for engineering services in the private sector?

- A) Yes
- B) No

Rachelle's firm opens a new branch office in a city where several politicians ask for significant support and, in some instances, it appears that "inducements" are necessary to be awarded engineering work. Despite her inclination to contribute financially to worthy candidates, the venal demeanor of these local politicians concerns Rachelle.

Question 11. Which board rule gives guidance to engineers on the matter of "inducements?"

- A) §137.57(b)
- B) §137.57(c)
- C) §137.57(d)
- D) §137.63(c)(4)
- E) §137.63(c)(5)

Rachelle decides to continue her tradition of contributing to individual candidates and to the engineering political action committee. She is satisfied that she is doing so to promote better

government and is not contributing amounts that would be construed as “buying” work.

Later, Rachelle’s firm has the opportunity to submit a Statement of Qualifications (SOQ) on a very large, high-profile transportation project in the city. The city will give preference for “local” talent.

Her business development team leader, Pearce, assembles the company’s experience record and prepares project-specific résumés for each member of the project team for inclusion in the SOQ. A fierce competitor, Pearce drafts the SOQ, embellishing (actually, overstating) the firm’s “local” capability to perform the engineering services for the City. Among other things, the SOQ attributes key expertise needed for the proposed transportation project to a senior engineer but that engineer works in an out-of-state branch of Rachelle’s firm. Pearce includes him in the SOQ, but fails to mention he is not “local.”

While reviewing the final draft of the SOQ, just prior to submittal, Rachelle notices these embellishments. Although it is not likely that any of the SOQ reviewers (City officials) will pick up on how Pearce has “embellished” her firm’s

qualifications, this troubles Rachelle.

In particular, Rachelle wonders whether it is deceiving to represent her firm in the way the SOQ describes its capabilities and experience.

Question 12. Which Section of the Act or which board rule most clearly directs Rachelle and her firm regarding the representations in the SOQ?

- A) §1001.203
- B) §1001.407
- C) §137.77
- D) §137.61(b)
- E) §137.63(b)(3)

Rachelle also notices that the Texas Act gives the Board authority to levy a fine for making misleading statements prohibited by Texas board rule §137.57(b).

Question 13. What is the suggested sanction for making a fraudulent statement or misrepresentation according to rule §139.35(b)?

- A) 1 year suspension/\$1,500 fine
- B) 2 year suspension/\$2,500 fine
- C) 3 year suspension/\$3,000 fine
- D) Revocation/\$3,000 fine
- E) Board’s discretion

Scenario 4

Practice in Accordance with Accepted Engineering Practices and Standards

Van Zandt, a retired petroleum engineer, relocates to a major metropolitan area. After a time, Van Zandt decides he can put his engineering skills to use by working as a sole proprietor engineer, doing part-time consulting on residential type construction issues.

He believes that if he mastered the intricacies of a refinery that he is qualified to consult for residential construction.

The work keeps him busy, the projects are quick and simple, paperwork is minimal, and the money is good. Thus Van Zandt soon finds him doing a brisk business, but then he hits a run of bad luck.

As part of a routine inspection, Van Zandt issues

a letter, bearing his Texas engineer’s seal, that states and certifies that foundation repairs for a residence are in conformance with industry standards.

However, a subsequent engineering inspection by another engineer determined that the foundation repairs did not meet city codes or industry standards and that engineer filed a complaint against Van Zandt.

The Board investigated the complaint and found that Van Zandt did not support his opinions and, since the letter contained false, deceitful and/or misleading information, Van Zandt was not acting as a faithful agent for his client.

Question 14. Where in the Act or board rules can

Van Zandt find the specific mandate pertaining to his responsibility to be a faithful agent for his client?

- A) §1001.103
- B) §137.55(b)
- C) §137.57(a) and (b)
- D) §137.63(a)
- E) §137.63(b)(4)

Some time later, Van Zandt testifies as an expert witness in a lawsuit. He makes the following statements under oath based on his own engineering judgment:

- *The contact of a pier to a beam under the west wall foundation of the client's retail store was reduced by only 10%, and*
- *A slab surface 17 inches out of level over 170 feet would be "within tolerance."*

Evidence discovered by another engineer showed the actual reduction in pier-to-beam contact was 82%, not 90%, and raised doubts about Van Zandt's opinion regarding the levelness of the slab surface.

Furthermore, the second engineer's report contained significant evidence in photos, graphics, and analytical calculations, and showed that Van Zandt's first statement was inaccurate and the second statement was both inaccurate and misleading.

Van Zandt's "quick and dirty" approach did not include adequate modeling, calculations, or analysis and thus afforded no basis for his statements at the time of his testimony.

The court determined that providing such testimony without fully disclosing the basis and rationale for his opinion was contrary to generally accepted scientific and engineering standards and principles, again putting Van Zandt before the Board.

Question 15. Which Section of the Act or board rules most clearly directs an engineer regarding his or her responsibilities when giving expert testimony?

- A) §1001.213
- B) §1001.004
- C) §137.59(c)

- D) §137.63(b)(4)
- E) §137.61(b)

Question 16. When approached with disciplinary action, Van Zandt claimed that he was not subject to such actions per the expert witness exemption in the Act. In reviewing §1001.004(e), is this true?

- A) Yes
- B) No

Van Zandt's ultimate downfall was related to another project, in which he wrote a letter, with his Texas professional engineer seal affixed, to the potential buyer of a home outside the city limits regarding his inspection of the septic system. Van Zandt stated that the septic system was constructed in accordance with the rules existing at that time and he certified that the septic system was functioning adequately.

But a professional sanitarian retained by the realtor inspected the same septic system the following week and provided a written report, in which he stated that the system appeared to be "non-standard." It was not constructed in accordance with state regulations and, in fact, constituted a health hazard with raw sewage exposed to the atmosphere through a non-sealable lid.

Subsequently, a county official inspected the same system and provided a written report to the residents indicating that the system could not be permitted and was illegally discharging sewage.

The Board deemed Van Zandt incompetent to practice in this area. He was also found grossly negligent, in part because he failed to identify a potentially dangerous sewage disposal situation that could potentially harm the public.

Question 17. Which Section of the Act or board rules determines gross negligence by an engineer is a violation?

- A) §1001.302(d)
- B) §137.55(b)
- C) §131.81(16)
- D) §131.81(15)
- E) §137.63(c)(2)

Scenario 5 Conflict of Interest

George is a graduate mechanical engineer, and having passed the FE exam during his senior year in college, he now works as an Engineer in Training (EIT) for a medium-sized engineering firm under the supervision of Alex, a licensed professional engineer.

The firm is contemplating submitting a qualifications package for the mechanical design related to a multi-story hospital addition. George's mother happens to be a prominent physician and a liaison official of the hospital board and has some influence in the final selection of the engineering firm that gets this project.

George recognizes that a conflict of interest may exist and decides to inform Alex, but before he does, he checks the Act and board rules for guidance.

Question 18. Which Section of the Act or which board rule concerns conflicts of interest?

- A) §137.57(d)
- B) §139.13
- C) §139.17
- D) §1001.053
- E) §137.53

George tells Alex about the possible conflict of interest, but Alex takes the position that since George is not a principal in the firm, no problem exists. He tells George not to worry, and proceeds to submit the firm's qualifications for consideration, making no mention of George's employment in the submittal.

George believes he has done all he needs to do by informing his employer of the possible conflict of interest.

Also, George discusses the matter with his mother, and based on their conversation he feels sure that she would not grant any favors because of his involvement in the project.

Still, the fact that Alex failed to mention him in

the qualifications package seems improper and causes George to remain uneasy. Should Alex have done more? Should George do more?

Question 19. Under which board rule is a licensed engineer such as Alex *obligated* to inform the client?

- A) §137.55(a)
- B) §137.61(c)
- C) §137.57(c)
- D) §137.63(c)(4)
- E) §137.65(b)

Shortly thereafter, Alex recognizes that George's relationship may be perceived as an ethical issue and decides to disclose the matter to all affected parties, in particular, to the hospital board.

Alex's firm is awarded the contract and Alex assigns George to do the HVAC design.

As it happens, Alex has a friend who manufactures automatic shut-off valves which are marketed to both design and mechanical contractor firms. Alex gets a small percentage of the profit from his friend when he specifies their use.

He instructs George to specify these valves on the project.

George is concerned by this request, but since he is not personally getting anything for specifying the valves, he proceeds with the design as instructed.

Question 20. Which Section of the Act or which board rule best prohibits Alex's actions to specify these valves?

- A) §137.57(c)
- B) §137.53
- C) §137.59(a)
- D) §1001.4526
- E) §137.63(c)(5)

A short time later, George realizes that the scope of this project requires that he optimize the design through the use of a proprietary software program,

one which the firm does not yet own and which will cost a few thousand dollars.

When George informs Alex of this need, Alex breaks into a broad smile and tells George, "I'm way ahead of you. Here, take this!"

Much to George's delight, Alex hands him the software. George is very pleased until, while uploading the program, he realizes that this is a pirated copy of the program that Alex "borrowed" from a previous employer.

Question 21. Which Section of the Act or which board rule best addresses Alex's dishonest practice when appropriating the pirated software?

- A) §137.55(a)
- B) §137.59(a)
- C) §137.35
- D) §137.63(b)(3)
- E) §1001.452

Scenario 6 Practicing Without a License

Jeff, an electrical engineer, submitted engineered design drawings for a parking garage lighting and vertical conveyance system to the Zip Company. The drawings bore his Texas engineer seal and signature and were dated December 12, 2003. But Board records revealed that Jeff's Texas engineer license expired on October 1, 2003.

Jeff renewed his license on January 2, 2004. Although his license is now current, the engineering work Jeff provided for the project while his license was expired was unlawful.

Question 22. Which Section of the board rule or Act best indicates that Jeff's actions were illegal in sealing the documents?

- A) §137.7
- B) §137.37
- C) §137.33(i)
- D) §1001.351
- E) §1001.353

It turns out that Jeff's Texas engineer license expired simply because he failed to immediately notify the Board in writing of his mailing address change that occurred when he changed jobs in May 2000. This resulted in Jeff not receiving the renewal statement that the Board mailed to his previous address.

Question 23. Informing the Board immediately of a change in address is required by which Section of the Act or board rule listed below?

- A) §1001.351
- B) §1001.353
- C) §137.5
- D) §137.37
- E) §137.33(i)

Jeff also learned that, according to board rule §137.5, he must also inform the board when he changes employment.

Scenario 7 Moral Courage

Denzel, a successful licensed civil engineer, becomes the president of his firm and puts in place a company code of ethics, drawing on several codes as models. Denzel's early experience has convinced him that professional responsibilities go beyond just obeying the law.

For example, he recalls a situation in the mid-
P01/revised 9/09

1980s when one of his geotechnical colleagues, Maria, observed inadequate shoring in a major utility trench. This was not Maria's project but was designed by one of her competitors, Paul. Although Maria attempted to bring the deficiencies to Paul's attention, it became clear to her that Paul was highly distracted and was not adequately monitoring the project. Further, Maria knew that

while it would be easier for her to ignore this possibly dangerous situation; if she did ignore the potential problem, she felt she would not be "protecting the health, safety, and welfare of the public" which is a vital responsibility of an engineer.

Question 24. If Paul fails to correct the situation, which Section of the Act or board rules informs Maria about her responsibility to report Paul to the appropriate authority or the Texas Board?

- A) §1001.552
- B) §137.55(c)
- C) §137.61(b)
- D) §139.11
- E) §137.51

Much later, just before his retirement, Denzel becomes occupied with a new challenge.

His firm wins a contract with the City to design a new overpass and provide engineering services during the construction phase. The project was assigned to one of their most respected engineers, Bill, a PE who designs the overpass and in the design specifications, he specifies the use of concrete barriers between opposing lanes for traffic control in the detour lanes around the construction zone.

After submitting the final design drawings and specifications, sealed in accordance with state law, the City engineer calls and requests that, for financial reasons, the traffic control measures consisting of large plastic barrels be placed instead of concrete barriers as specified in Bill's submittal.

Bill informs Denzel that the applicable design standards do allow for the use of barrels, but he opposes the change, expressing the concern that the change might compromise the level of safety needed in this particular situation because of the high traffic volume and under-enforced speed limits. Denzel supports Bill's opinion.

Never-the-less, the City's transportation engineer, also a PE, decides that the additional risk is acceptable, and makes the change in Bill's

design specifications.

Bill and Denzel are aware of this change but make no further comment.

Question 25. Which Section in the board rules most clearly instructs engineers in the Board's requirements when making changes to the design work done by another engineer?

- A) §137.33(h)
- B) §137.57(c)
- C) §137.33(b)
- D) §137.33(i)
- E) §137.33(f)

An unfortunate accident occurs during construction of the overpass. A tragic head-on collision between two vehicles resulted in the loss of several lives. This tragedy would likely have been prevented if different decisions had been made by the city engineer regarding the use of concrete barriers instead of plastic barrels.

This sad experience, late in his career, was a sobering reminder to Denzel that a high standard of care in engineering practice is crucial in the engineering profession.

It also made Denzel convey to all his engineers that when they agree to allow someone to make changes in their design and specifications, they must take that decision very seriously.

He reminded his engineers that it is their responsibility to always be on the lookout for situations that may put the public in "Harm's way" and to always striving for excellence and high standards to protect the health, safety and welfare of the citizens of Texas.



TEXAS BOARD OF PROFESSIONAL ENGINEERS

1917 IH 35 SOUTH
AUSTIN, TEXAS 78741

OFFICIAL TRANSCRIPT REQUEST

After filling in the information requested below, send this form to the appropriate school. The School should return it to the Board office with an OFFICIAL copy of your complete transcript. Only one copy of this form has been provided. Please make additional copies as required.

APPLICANT'S NAME _____

APPLICANT'S DAYTIME PHONE NUMBER _____

Last 4 digits of SSN _____

COLLEGE OR UNIVERSITY ATTENDED _____

Dear Registrar:

The Texas board of Professional Engineers requires an official transcript of an engineering or related science degree or 15 or more semester hours towards an engineering or related science degree. This letter will serve as my written request to have my transcript sent directly to the Board at the above address.

Enclosed is the processing fee in the amount of \$ _____

Thanking you in advance,

Signature

Date

DOCUMENTATION FOR NON-ACCREDITED AND FOREIGN DEGREES

The following additional documentation is required from applicants who graduated from non-accredited or foreign degree programs:

1. TEST OF ENGLISH AS A FOREIGN LANGUAGE (TOEFL) AND TEST OF SPOKEN ENGLISH (TSE)

Applicants must speak and write the English language. Proficiency in English may be evidenced by possession of an accredited Bachelor's degree [as defined by 133.21(c)] taught exclusively in English, or passage of the TOEFL with a score of 550 or better and passage of the TSE with a score of 45 or better. The TOEFL and TSE representative is:

**TOEFL and TSE Services
Educational Testing Service
P. O. Box 6151
Princeton, NJ 08541-6151
Telephone: (609) 771-7100**

The TOEFL/TSE code for this agency is 9653. Applicants requesting a waiver from the TOEFL and/or TSE requirement must submit a written request and supporting reasoning to the Executive Director. A waiver from the TOEFL and/or TSE requirement may be granted by the Executive Director upon receipt of one of the following:

- a) evidence that the degree is earned from an accredited program in one of the Washington Accord countries; or
- b) a letter from the applicant's employer which verifies the applicant's proficiency in the written and oral communication of the English language; or
- c) transcripts which verify six full-time semesters (6 credit hours per semester) toward an advanced engineering degree in the United States.

2. DEGREE EVALUATION

Applicants possessing degrees from non-accredited programs must furnish, at their own expense, a detailed evaluation of course work completed. The degree evaluation must include an "Equivalency Transcript" (a detailed evaluation of coursework with grades) and be sent directly to the Board office by the evaluation service. The foreign degree evaluation services selected by the Board are:

NCEES Credentials Evaluations
P.O. Box 1686
Clemson, SC 29633
1- 800-250-3196 or 864-654-6824
FAX: 864-654-6033

Web Site:
http://www.ncees.org/credentials_evaluations.php

SpanTran Educational Services, Inc.
7211 Regency Square Blvd., Suite 205
Houston, TX 77036-3197
713-266-8805 ext. 106
FAX 713-789-6022

Web Site: www.spantran-edu.org
E-mail: info@spantran-edu.org

Josef Silny and Associates
7101 SW 102 Avenue
Miami, FL 33171
Tel: 305-273-1616
Fax: 305-273-1338 / Translation Fax: 305-273-1984
Web Site: www.jsilny.com
E-mail: info@jsilny.com

Foreign Credential Services of America
Dr. William Paver
1910 Justin Lane
Austin, TX 78757-2411
512-459-8428
FAX 512-459-4565
Web Site: www.fcса.biz
E-mail: info@fcса.biz or paver@mail.utexas.edu

Educated Choices, LLC
127 Inwood Ave.
Upper Montclair, NJ 07043
973-746-6512
FAX 973-746-6597
Web Site: www.educatedchoices.com
E-mail: info@educatedchoices.com

Applicants requesting a waiver from evaluation of a degree must submit a written request and supporting reasoning to the Executive Director.

A waiver from the degree evaluation may be granted by the Executive Director under the following conditions:

- a) the degree is earned from an institution in the United States and sufficient resources are available for the Board to evaluate it (including all TAC/ABET-accredited degrees);
- b) the degree does not contain curricula that is deemed by the Executive Director to be an integral part of the applicant's engineering education.

3. ENGLISH TRANSLATION

All documents supporting an application which are written in a language other than English must be accompanied by a certified English translation.

4. OFFICIAL TRANSCRIPTS REQUIRED

Per Board Rule 133.33(a), the applicant must have the school furnish an official transcript directly to the TBPE.

TEXAS BOARD OF PROFESSIONAL ENGINEERS

INSTRUCTIONS FOR PREPARING THE SUPPLEMENTARY EXPERIENCE RECORD

TO THE APPLICANT:

The purpose of the Supplementary Experience Record (SER) is to explain in detail the engineering performed in the employment engagements you list on your application in Section 3, Experience. A SER must be provided for **ALL** engineering experience claimed. Descriptions of non-engineering engagements are not needed for your SER. The SER **MUST** be **TYPED IN BLACK** and must be written in the first person, narrative form, using complete sentences and active engineering type verbs.

In describing your experience, use specific tasks such as: I designed, I calculated, I analyzed, I recommended, etc. Avoid using vague terms such as: I was assigned to, I was responsible for, in charge of, participated in, etc.

In general, you should include in the description of your engineering experience the following:

- (1) The general nature of your position in each engagement,
- (2) The engineering work that you personally performed,
- (3) The elements of engineering design and analysis,
- (4) The identity of the projects by name, location, size, etc., and
- (5) If you performed several projects which were similar in nature in an engagement, you may describe some typical projects in detail and then list similar ones by name, location, size, etc. identifying any unique differences.

AN EXAMPLE OF SUPPLEMENTARY EXPERIENCE RECORD IS PROVIDED AT THE BOTTOM OF THESE INSTRUCTIONS.

If an engagement (which means one term of employment with the same company) consists of numerous projects, it is not necessary to separate these by engagements. If you changed supervisors, or if you changed positions, etc., it is not necessary to list it as another engagement. Your detailed description of these changes should be noted in the SER. The purpose for this is to show progressive engineering experience of an increasing standard of quality and responsibility. (Refer to Board Rule 133.43 describing acceptable experience.)

The SER is **REQUIRED** and plays a very significant part in the Board's review of your application. It is your description of the engineering work that you have personally performed (Refer to Board Rule 133.43). If you are applying for original licensure you **MUST** submit a SER for each and every engagement that you claim under the engineering column of the application, from the date of receipt of your first engineering degree to the present. If you are a former Texas license holder whose license has been expired for two or more years, you **MUST** submit a SER for all employment engagements from the date the license expired, describing at least the last four years of engineering experience [Refer to Board Rule 133.23 (b)(4)].

There is no prescribed length for your SER, but it should not exceed 12 pages. The description you provide should show a reviewer, who may not be familiar with your work, that you have achieved the necessary engineering experience to meet the requirements for licensure. The pages of your SER should be numbered consecutively. **EACH** and **EVERY** page of your SER **MUST** be signed and dated by you.

YOUR ORIGINAL SER IS FOR THE BOARD'S REVIEW AND MUST BE INCLUDED WITH YOUR APPLICATION. THE BOARD WILL NOT CONSIDER AN APPLICATION IF THE ORIGINAL SER IS NOT INCLUDED WITH THE APPLICATION. DO NOT SEND YOUR ORIGINAL SER TO YOUR PROFESSIONAL ENGINEER (P.E.) REFERENCES. Send a copy of the applicable page or pages from your SER for each engagement to a P.E. reference who is to verify the experience that you have claimed for that engineering engagement. The reference writer will sign and date the SER copy(ies) in the lower left corner of the form and return the signed copy(ies) along with a completed reference statement in a **CONFIDENTIAL** envelope to you. (For further details, refer to Board Rule 133.53 and the instructions on the reverse side of the REFERENCE STATEMENT FORM.)

NOTE: Do **NOT** submit publications, blueprints, papers or other documents unless requested to do so by the Board. Such documents will have no effect on the final disposition of your application and the Board will not be responsible for returning them to you.

EXAMPLE

USE APPROPRIATE
PAGE NUMBERS

SUPPLEMENTARY EXPERIENCE RECORD

Page no. 1 of 9 pages

REFER TO THE REVERSE SIDE OF THIS FORM FOR INSTRUCTIONS FOR COMPLETING THE SUPPLEMENTARY EXPERIENCE RECORD.

SAME
NUMBERS
APPLICABLE
SECTION OF
APPLICATION

DESCRIPTION OF ENGINEERING PERFORMED:

(Use complete sentences written in first person.)

ENGAGEMENT NO. ____ FROM: ____ TO: ____ (dates)

NAME OF EMPLOYER AND LOCATION: ABC Engineering Company, Dallas, Texas

ENGINEERING SUPERVISOR'S NAME(S): Samuel J. Smythe, P.E.

GENERAL:
WHEN, WHERE,
AND WHAT

My first year and a half of experience entailed being a member of the engineering production staff designing Wal Mart Stores. I performed analysis and design on 29 Wal Mart Stores in 7 different states.

TYPE OR
DESCRIPTION
OF WORK

Each project included the design of foundation, walls, and roof and the interface of each. Occasionally special structures were included. Local codes were considered in each situation.

I designed the roof framing, which consisted of a joist/joist girder system supported by tube columns, the masonry walls, the foundation systems (spread footing or pier and grade beam). I also designed a two-way flat plate slab supported by timber piles for the Wal Mart in Philadelphia, PA.

TELL US IN
DETAIL WHAT
YOU
PERSONALLY
PERFORMED

One of the more challenging projects I designed is located in Hallandale, Florida. I analyzed and designed the 12" load bearing masonry walls for 100 mph wind forces under the South Florida Building Code. The lateral system involved 2 C-shaped cantilevered diaphragms separated by an expansion joint. I calculated the deck shears for the C-shaped diaphragm taking into account a rigid diaphragm analysis. Due to the high deck shears, I determined that zones of heavier gauge roof deck must be used along the perimeter of the shear walls. I also calculated the tension/compression chord forces of the cantilevered diaphragm and sized the chord angles. I designed the spread footing foundation system for gravity loads as well as the large uplift loads. I concluded that for an economical design, the footing must be placed 2.5 feet below the finished floor to take advantage of the dead load of the soil above the footing. This particular Wal Mart also had a wood framed canopy along the front of the building. I designed all the connections necessary (i.e., hurricane ties to hold the canopy down at the ledger and adhesive anchors to anchor the ledger to the masonry wall) to resist the wind uplift forces.

The projects, ranging in size from 90,000 to 120,000 square feet, were located in the following cities:

Aberdeen, MD
Bedford Park, IL
Philadelphia, PA

Albuquerque (E), NM
Boca Roton, FL

Hallandale, FL
Coshocton, OH

YOU MAY LIST ADDITIONAL SIMILAR PROJECTS BY TITLE,
SIZE, LOCATION, ETC. BELOW OR ON AN ADDITIONAL SHEET OF PAPER.

Samuel Smythe, P.E.
Reference's Signature

11-7-96
Date

Your Name
Applicant's Signature

11/1/96
Date

SUPPLEMENTARY EXPERIENCE RECORD

(Refer to the instructions and example provided before completing this form. Only one copy of this form has been provided. Please make additional copies as required.)

APPLICANT'S FULL NAME: _____

DESCRIPTION OF ENGINEERING PERFORMED

ENGAGEMENT NO. _____ FROM: _____ TO: _____ (dates)

NAME OF EMPLOYER AND LOCATION: _____

ENGINEERING SUPERVISOR'S NAME(S): _____

I certify that the above Supplementary Experience Record is true and correct to the best of my knowledge.

Reference Provider's Signature

Date

Applicant's Signature

Date

TEXAS BOARD OF PROFESSIONAL ENGINEERS
INSTRUCTIONS FOR COMPLETING THE REFERENCE STATEMENT

TO THE APPLICANT:

Complete the top portion of the Reference Statement Form -- Employment Engagement Number, Firm/Company Name, Dates of Employment, and Applicant's Full Legal Name.

Send a copy of the applicable portion of the Supplementary Experience Record (SER) and this form to the professional engineer (P.E.) who will verify the engineering experience documented in the SER [Refer to Board Rule 133.53]. Each engineering engagement claimed to meet the minimum years of experience required must be verified by a P.E. reference. Instruct the P.E. references to evaluate your experience record and complete this form in the manner described below. Your reference provider must return these completed items to you in a sealed envelope that has been prepared in accordance with the instructions. Submit these sealed statements to the Board with your application.

TO THE REFERENCE WRITER:

1. All reference providers must be a licensed professional engineers. You must complete the Reference Statement form and indicate on the Reference Statement form whether the reference is an evaluation of the applicant's character and work experience either through personal knowledge of the applicant's work or review of the work experience described in the SER [Refer to Board Rule 133.51]. You must complete all questions. If necessary, continue explanations and comments on another sheet of paper.
2. Place the completed reference form and the signed SER in an envelope. Sign your name across the closure flap and place transparent tape over your signature. If you are a licensed engineer in another State, you must include a copy of your pocket card, or other verification to show that your license is current.
3. Return the properly sealed envelope to the applicant.

The Reference Statement and the signed SER excerpt are confidential and are not classified as public documents under the Texas Public Information Act, and thus are not subject to discovery, subpoena, or other disclosure by the applicant or anyone else.

VERIFICATION OF LICENSURE AND/OR EXAMINATION

(Only one copy of this form has been provided. Please make additional copies as required.)

TO: TEXAS BOARD OF PROFESSIONAL ENGINEERS
1917 IH 35 South, Austin, Texas, 78741-3702 (512) 440-7723 / FAX: (512) 442-1414

FROM:

(Board name & Address)

(Name of Applicant)

(Street Address)

(City)

(State)

(Zip)

SOC. SEC. NO.:

I. THE ABOVE NAMED PERSON WAS LICENSED AS:

	License Number	Date Issued	Valid Until	Date Applied
<input type="checkbox"/> PROFESSIONAL ENGINEER				
<input type="checkbox"/> ENGINEER-IN-TRAINING				

II. BASIS OF LICENSURE AND/OR EXAMINATION VERIFICATION:

1. ☐ WRITTEN EXAMINATION:

_____ hours NCEES EIT OR FE exam

Date of Exam: _____ Score: _____

_____ hours NCEES PE exam in _____ engineering

Date of Exam: _____ Score: _____

_____ hours NCEES PE exam in _____ engineering

Date of Exam: _____ Score: _____

_____ hours other non-NCEES exam(s)

Date of Exam: _____ Score: _____

☐ EIT/FE ACCEPTED FROM: _____

2. ☐ COMITY WITH: _____

3. ☐ EDUCATION AND EXPERIENCE: If checked and licensee has less than 8 years experience, including graduation from ABET engineering curriculum. Please give details on other side.

4. ☐ OTHER: (Please give details on other side)

5. Has disciplinary action ever been taken against this licensee? ☐ Yes ☐ No
If so, please give details on other side, including violation, penalty, and date of disciplinary action.

BY: _____

TITLE: _____

DATE: _____

(BOARD SEAL)

Applicant for Licensure Information Change Form

**DO NOT USE THIS FORM IF YOU ARE A LICENSED
PROFESSIONAL ENGINEER**

**THIS FORM CAN BE FILLED IN ON-LINE, PRINTED,
AND MAILED OR FAXED TO THE BOARD.**

INSTRUCTIONS:

It is the applicant's personal responsibility to maintain current information with the Board and notify the Board office as changes occur. The home address is considered the address of record for all correspondence throughout the application, examination and initial licensing process.

Failure to notify the Board office of an address change could delay the receipt of your license.

By submitting this information in writing, you are certifying that the information you have provided on this form is true and correct to the best of your knowledge. This submittal will act as an electronic signature.

**Mail or Fax to:
Texas Board of Professional Engineers
1917 IH-35 South, Austin, TX
78741-3702
Phone: (512) 440-7723
Fax: 442-1414**

Address Information

Last 4 Digits of Social Security	Home Phone	Home Email Address
Last Name	First Name	Middle Name
Home Address		
City	State	Zip
Country	Effective Date of Address Change	

Employer Information**Primary Employer**

Full Legal Trade or Business Name		Effective Date of Change	
Status of Business (Corp., Co. etc.)	Physical Location by Street Address and Suite Number		
City	State	Zip	Country
Relationship (Officer, Full-time employee, etc.)	Business Phone	Business Email	

Secondary Employer (If Applicable)

Full Legal Trade or Business Name		Effective Date of Change	
Status of Business (Corp., Co. etc.)	Physical Location by Street Address and Suite Number		
City	State	Zip	Country
Relationship (Officer, Full-time employee, etc.)	Business Phone	Business Email	

Additional Secondary Employer (If Applicable)

Full Legal Trade or Business Name		Effective Date of Change	
Status of Business (Corp., Co. etc.)	Physical Location by Street Address and Suite Number		
City	State	Zip	Country
Relationship (Officer, Full-time employee, etc.)	Business Phone	Business Email	

REFERENCE STATEMENT

(BEFORE COMPLETING THIS FORM, PLEASE READ THE REFERENCE STATEMENT INSTRUCTIONS. ONLY ONE COPY OF THIS FORM HAS BEEN PROVIDED. PLEASE MAKE ADDITIONAL COPIES OF THIS FORM AS REQUIRED.)

TO BE COMPLETED BY APPLICANT

Verification for employment engagement # _____
Firm/Company Name _____, from _____ to _____ (dates)
Applicant's full Legal Name: _____

Note: Please refer to Sections 133.51, 133.53 and 133.55 of the rules. Reference statements are confidential and not subject to release to the applicant nor the Texas Public Information Act.

Reference Provider's Name (Typed or Printed): _____

Employed by (Include City, State & Zip): _____

Business Title: _____ Business Phone: _____

My current state of primary licensure is: (State) _____, P.E. No.: _____ Expiration Date: _____

Other Professional Engineer Licenses Held:

(If licensed PE in state other than Texas, provide copy of pocket card or other verification)

State: _____ No.: _____ Expiration Date: _____

Reference Evaluation is: ☐ Character & Personal Knowledge of Work Described in of SER **[Be sure to sign the SER]**
☐ Character & Review of SER only for Purpose of Reference Statement **[Be sure to sign the SER]**

You may attach a page on which to provide more information.

1. How long have you known the applicant? _____

2. Are you related to the applicant? ☐ No ☐ Yes If so, how? _____

3. Was/is your relationship with the applicant ☐ Personal? ☐ Business?

Please explain:

Dates of business relationship: From _____ to _____

4. The Texas Engineering Practice Act states that a person seeking to obtain a license to practice professional engineering shall provide evidence of good professional character and reputation which, in the judgment of the Board, is sufficient to insure that the individual can consistently act in the best interest of clients and the public in any practice setting. Such evidence shall establish that the person is able to distinguish right from wrong, is able to think and act rationally, is able to keep promises and honor obligations, and is accountable for his/her own behavior. How would you describe the applicant's character and reputation?

5. Do you know of anything that would negatively affect the applicant's ability to practice as an independent professional engineer?

☐ No ☐ Yes If yes, explain

6. What have you observed that convinces you that the applicant (has/has not) adequately applied engineering education, training, and experience in the practice of engineering?

7. Do you believe that the applicant's experience was sufficiently complex and diverse, and of an increasing standard of quality and responsibility, to provide sufficient professional growth for the applicant to be recommended for a license? ☐ No ☐ Yes
Please explain and add additional comments:

8. Based on your knowledge and observations, do you believe that the applicant has reached a level of competency to be placed in responsible charge of engineering work in his/her discipline? ☐ No ☐ Yes

Please explain and add additional comments:

Reference Provider's Signature

Date